

and post-discharge antibiotic use to identify the infection rate. The medical notes of the respondents were then reviewed to identify co-morbidities, operative data and antibiotic administration.

Results: 161 patients were contacted and we received 96 responses (response rate 59.6%). Data collection was completed for 89 cases. The overall infection rate was 24%. 46% patients (41/89) had no prophylactic antibiotics; 27% (11/41) developed a wound infection. 42% patients (37/89) had a full course of prophylactic antibiotics; 22% (8/37) developed a wound infection. This difference was not statistically significant. Route of administration: Patients who received intravenous antibiotics had an infection rate of 12.5% (1/8), compared to 30% (3/10) for oral antibiotics and 16% (3/19) for topical chloramphenicol ointment.

Conclusion: The use of prophylactic antibiotics in elective plastic surgery does not significantly reduce postoperative wound infection rates. However, topical chloramphenicol ointment use may be beneficial and should be investigated further.

0304: INITIATING A TRANSFUSION PROTOCOL FOR FREE DIEP FLAP BREAST RECONSTRUCTION IN NORTH BRISTOL NHS TRUST

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Aims: The authors aimed to identify the transfusion rate for patients having free deep inferior epigastric perforator (DIEP) flap breast reconstruction and highlight the role of pre-operative blood transfusion cross matching.

Methods: A retrospective note review was performed between March 2007 and November 2011 of all patients undergoing free DIEP flap breast reconstruction post mastectomy. Patient demographics, pre-operative and post-operative haemoglobin and haematocrit, operative time, blood transfusion and post-operative complications were compared.

Results: A total of 174 free DIEP breast reconstructions were performed on 145 patients; 116 unilateral and 29 bilateral procedures. 113 patients had delayed breast reconstruction whilst 32 patients underwent mastectomy and immediate reconstruction. The overall transfusion rate was 26.9%, 24 patients were transfused despite having a post-operative haemoglobin of more than 7g/dl. 44 patients had a valid group and hold and 20 of these patients had a cross-matched sample pre-operatively but did not receive a blood transfusion.

Conclusions: The authors concluded that unilateral and bilateral free DIEP operations should not be cross-matched prior to surgery. This has fiscal implications for the trust and a clear protocol for staff to follow. This process might be applied to other general and plastic surgical operations.

0381: BCC EXCISION AUDIT IN PLASTIC SURGERY

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Aims: To re-audit the incomplete excision rate of Basal Cell Carcinomas (BCCs) by a single plastic surgery department to monitor performance.

Introduction: Excision margins were analysed from 115 consecutively excised BCCs between 09/09/2011 and 31/10/2011.

Analysis: Of the 115 BCCs excised 6 (5.2%) were incompletely excised (where the lesions were involved at the the surgical margins). All incompletely excised lesions involved the circumferential margin and none involved the deep margin.

Discussion: Guidelines from The British Association of Dermatologists published in 2008 suggest that a 4-5mm margin will completely excise approximately 95% of BCCs. An incomplete excision rate of 5.2% is comparable to studies from other British plastic surgical units. Data collected from a similar audit in September 2010 showed a 7.4% incomplete excision rate for BCCs in the same plastic surgery department, suggesting that the department's performance has remained consistent with no statistical difference between the two sets of data ($p=0.5722$).

Conclusion: In order to minimise incomplete excision rates surgeons should assure that they are excising lesions with standardised 4-5mm circumferential margins regardless of anatomical position, wherever possible. This may require an increase in the number of local flaps or grafts performed in order to reconstruct defects.

0409: AN AUDIT OF ANTIBIOTIC PROPHYLAXIS IN PLASTIC SURGERY: A SINGLE-CENTRE EXPERIENCE

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Aim: Incorrect antibiotic usage is financially expensive and may harm individuals. The SIGN Guidelines 104 stipulate "best-practice" in antibiotic prescriptions to prevent surgical-site infections. This audit aimed to establish the appropriateness of antibiotic prescriptions in the department.

Method: A retrospective-study of acute ($n=58$) and elective ($n=20$) admissions to the plastic surgery department over a period of 1 week was performed using the SIGN 104 guidelines for antibiotic usage in surgical wounds.

Results: Antibiotics were prescribed in trauma (79%) and elective (55%) cases. Co-Amoxiclav was prescribed in 60% of trauma and 45% of elective cases. 38% of trauma prescriptions and 20% of elective cases were inappropriate. Co-Amoxiclav was inappropriately prescribed in 51% of trauma and 33% elective cases. In clean-contaminated trauma cases a 2:1 inappropriate: appropriate prescription ratio existed. Inappropriate prescriptions for trauma cases included 19 post-op antibiotic courses for clean-contaminated wounds; 2 IV antibiotic courses for clean-contaminated wounds; and 1 contaminated case with short-course antibiotics. Inappropriate prescriptions for elective cases included 3 post-op courses of antibiotics for clean wounds; and 1 post-op course for a clean-contaminated wound.

Conclusion: There is a high inappropriate antibiotic prescription rate in plastic surgery. Guidelines should be established to prevent this in the future.

0466: PREDICTING MULTI-FOCALITY IN NECROTISING FASCIITIS: A PARADIGM CHANGER OR PARALYSIS BY ANALYSIS?

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Introduction: Multifocal Necrotising Fasciitis is defined as more than one non-contiguous area of necrosis. Current management guidelines of necrotising fasciitis pertain to single-focus disease, with no recognition of the implications of multi-focality.

Aim: To conduct the first ever systematic review on multi-focal necrotising fasciitis.

Materials and Methods: A PRISMA-guided systematic review of MEDLINE, OLD MEDLINE and Cochrane Collaboration was performed from 1966 to March 2011 using sixteen search terms. Of the papers that demonstrated multi-focality, the following data was extracted: patient demographics, inciting injury, presentation time-line, microbial agents, sites affected, objective assessment scores, treatment and outcome.

Results: 33 individual cases of Multifocal Necrotising Fasciitis were included in the quantitative analysis. 52% of cases were Type II Necrotising Fasciitis. 42% had identifiable inciting injuries. 21% developed multifocal lesions non-synchronously, of which 86% were Type II. 94% of cases had incomplete objective assessment scores. One case identified inflammatory imaging findings prior to clinically detectable necrosis.

Conclusions: Multifocality in Necrotising Fasciitis is likely to be associated with Type II disease. We postulate that validated objective tools will shape management pathways and identify high risk groups. We recommend adoption of regional Multifocal Necrotising Fasciitis registers and consideration of early pre-emptive imaging in select cases.

0484: REDUCING ABDOMINAL COMPLICATIONS FROM BREAST RECONSTRUCTION USING DIEP FLAPS

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Introduction: Abdominal wound complications can cause significant post operative morbidity. A retrospective review of 61 patients, undergoing DIEP breast reconstruction over a 26 month period, by a single surgeon, showed delayed wound healing requiring conservative treatment in 16 (26.2%) and operative treatment in 4 (6.6%) patients. 3 patients (4.9%) developed a seroma and 4 patients (6.6%) developed an abdominal bulge (6.6%). Junior team members had been performing abdominal wounds closure. These results were compared to a large meta-analysis of 1997 patients undergoing abdominal flap breast reconstruction (Salgarello et al, 2011).

Methods: A new regime of abdominal closure involving 3 layers of monocryl, with either the senior author supervising a senior trainee or performing the procedure himself, was instituted. Data was collected retrospectively on subsequent consecutive patients undergoing DIEP reconstruction.